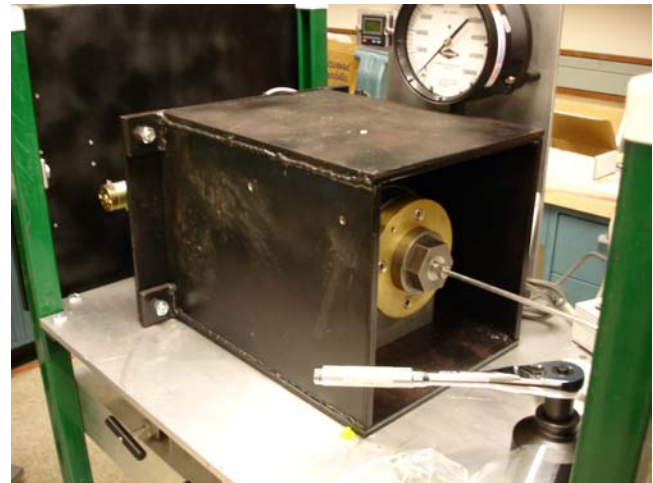


New High Pressure Gas Loading System

Eric Angle, E. Fontes, D. Richter, C. Z. Zha
CHESS, Cornell University **DMR-0225180**

Cornell Undergraduate Eric Angle (right) led the design and construction of a novel high-pressure gas loading system for diamond anvil cell (DAC) specimen chambers. DACs are used to explore the properties of gases at pressures encountered deep within the outer planets, or for use as pressurization media for studies of minerals and metals deep within the earth. Loading the DAC with gases has historically been a major difficulty limiting many studies; this system overcomes this difficulty. The DAC gas loading system considerably extends capabilities in high-pressure science possible at CHESS.



(Below) View of gas loading cylinder inside explosion protective steel case.